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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,807	12/14/2000	Gregory Donald Troxel	00-4001	6622
32127	7590	05/07/2004	EXAMINER	
VERIZON CORPORATE SERVICES GROUP INC. C/O CHRISTIAN R. ANDERSEN 600 HIDDEN RIDGE DRIVE MAILCODE HQEO3H14 IRVING, TX 75038			EUGENE, WANDA	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 05/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/736,807

Applicant(s)

TROXEL ET AL.

Examiner

Wanda Eugene

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 100c line 23 pg 13. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 18 of copending Application No. 09/737108. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are generally narrower than the

claims in you application. Narrower claims in another application constitute obvious double patenting of broad claims in the instant application.

Claims 1 and 9 in application 09/736807 teaches the limitations:

Delivering messages over a network, the method comprising:

(a) receiving a network layer address of a first node at a first router on a first sub-network, the first sub-network being topologically foreign with respect to the network layer address of the first node;

(b) sending the network layer address of the first node and the network layer address of the first router toward a first remote node at a second sub-network, the second sub-network being topologically foreign with respect to the network layer address of the first node;

(c) receiving at the first router a message tunneled by the first remote node using the sent network layer address of the first router, the message tunneled by the first remote node in response to a message at the first remote node addressed to the first node;

(d) de-tunneling the message tunneled toward the first router by the first remote node; and

(e) sending the de-tunneled message toward the first node; whereby (a)-(e) proceed without requiring communication with any node on a sub-network that is a topologically home sub-network with respect to the network layer address of the first node.

Which are evidence in claim 1 and 18 respectively, of application 09/737108:

Delivering network messages, comprising:

(a) receiving at a first router a network layer address of a node, the first router and the node both being on a sub-network that is topologically foreign with respect to the network layer address of the node;

(b) sending from the first router the received network layer address of the node and a network layer address of the first router toward a second router, the second router being on a sub-network that is topologically foreign with respect to the network layer address of the node;

(c) receiving at the first router a message tunneled toward the first router by the second router in response to receiving a message at the second router having a destination address of the node;

(d) de-tunneling the tunneled message; and

(e) sending the de-tunneled message toward the node; whereby (a)-(e) proceed without requiring communication with any node on a sub-network that is a topologically home sub-network with respect to the network layer address of the node.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize the sending of the network layer address in (b) of application 09/736807 as sending the network layer address from the first router as recited in (b) application 09/737108 and receiving a message addressed to the first node in (c) application 09/736807 as receiving a message address to the node of (c) application 09/737108. Applications 09/737108 and 09/736807 differ in regards specifying an understood sender in the case of the router and in the specification of the title of the node, as shown above. They still however, perform the same functions, thus the only difference lies in a narrower and broader recitation.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1- 16 are rejected under 35 U.S.C. 102^e(b) as being anticipated by Das et al. (U.S. 2001/0036834).

Regarding claims 1 and 9, Das et al. discloses

(a) receiving a network layer address (**identity of mobile node 141 fig 1**) of a first node (**mobile node 110 fig 1**) at a first router (**subnet agent 140B fig.1**) on a first sub-network (**subnet B fig. 1**), the first sub-network being topologically foreign with respect to the network layer address of the first node (**when a mobile node decides that it is going to change its current subnet agent the mobile sends a Movement Imminent message to its subnet agent par. 0023**);

(b) sending the network layer address of the first node (**identity of mobile node 141 fig 1**) and the network layer address of the first router (**subnet agent 140B fig. 1**) toward a first remote node (**mobility agent 130 fig. 1**) at a second sub-network (**subnet C fig. 1**), the second sub-network being topologically foreign with respect to the network layer address of the first node (**the mobile node relays the mobile identity to the mobility agent which forwards packets from the mobile node to subnet agents 140A, 140B and 140C par. 0023**);

(c) receiving at the first router (**subnet agent 140B** fig. 1) a message tunneled by the first remote node using the sent network layer address of the first router, the message tunneled by the first remote node in response to a message at the first remote node addressed to the first node (**the mobility agent encapsulate packets for the mobile node and forwards to the multicast group members, subagents 140A, 140B and 140C** par. 0023)

(d) de-tunneling the message tunneled toward the first router by the first remote node (**each member of the multicast group then buffers received packets for the mobile node** par. 0024); and

(e) sending the de-tunneled message toward the first node; whereby (a) - (e) proceed without requiring communication with any node on a sub-network that is a topologically home sub-network with respect to the network layer address of the first node (**forwarding the cached packets to the mobile node** par. 0024)

Regarding claims 2 and 10, Das et al. teaches an initial message sent from the first remote node (**mobility agent 130** fig. 1) toward the first node after the first node (**mobile node 110** fig. 1) establishes communication with the first sub-network (**subnet B** fig. 1) is not received by any node on a sub-network that is a topologically home sub-network with respect to the network layer address of the first node (**when a mobile enters a subnet network the subnet agent is responsible for assigning a local care of address i.e. registers, thus the mobility agent handles mobile nodes located on one or more subnet A, B, C and D** par. 0022).

Regarding claims 3 and 11, Das et al. discloses (a) - (e) proceed without communication with any node on the sub-network that is a topologically home sub-network with respect to the network layer address of the first node (**subnet agent is to be distinguished from a home**

agent in the sense that it is an agent on a network other than the home network of the mobile node par. 0022).

Regarding claims 4 and 12, Das et al. discloses the network layer address of the first node comprises an Internet Protocol (IP) address **(then subnet agent provides the mobile node with the care-of-address, which also known as a temporary IP address** par. 0022)

Regarding claims 5 and 13, Das et al. discloses determining a link layer address of the first node; and wherein sending the de-tunneled message to the first node comprises sending the de-tunneled message using the determined link layer address **(the mobile handoff, of the packets retrieved from the encapsulation, occurs when the local address has been assigned to the mobile node** par. 0029 and par. 0030).

Regarding claims 6 and 14, Das et al. discloses the first node comprises a wireless node **(the network depicts a mobile node moving from one subnet to another** par. 0020)

Regarding claims 7 and 15, Das et al. discloses the first router comprises a foreign agent configured to communicate with a home agent on the first node's topologically home sub-network **(the home agent, which resides on the mobile nodes home network, is connected to subnet agent 140B through subnet B via a common router** par. 0022).

Regarding claims 8 and 16, Das et al. discloses

(f) sending the network layer address of the first node (**mobile node 110** fig 1) and the network layer address of the first router (**subnet agent 140B** fig.1) toward a second remote node (**mobility agent 220** fig. 2) at a third sub-network (**subnet C** fig. 1), the third sub-network

being topologically foreign with respect to the network layer address of the first node (**mobile node sends a message to a subnet agent of the subnet it is currently on indication that the mobile node is about to change subnets 220 fig. 2 par. 0024**);

(g) receiving at the first router a message tunneled by the second remote node using the sent network layer address of the first router, the message being tunneled in response to a message at the second remote node addressed to the first node (**the mobility agent then encapsulates packets destined for the mobile block 252 and forwards the encapsulated packets to subnet agents of the multicast group, block 254 par. 0028**);

(h) de-tunneling the message tunneled to the first router by the second remote node (**when a neighboring subnet receives encapsulated packets via the multicast, it stores the packets, thus de-encapsulating the packet in order to store it in a buffer par. 0028**);
and

(i) sending the de-tunneled message toward the first node; whereby (f) - (i) proceed without requiring communication with any node on a sub-network that is a topologically home sub-network with respect to the network layer address of the first node (**when the mobile node then requests a local address on a subnet of a subnet agent, the subnet agent then enables the handoff process to begin par. 0030**).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Das et al. (U.S. 2002/0026527) Methods and systems for generalized mobility solution using a dynamic tunneling agent

Karagiannis (U.S. 2002/0015395) Methods and systems for inter-operability between mobile IP and RSVP during route optimization

Agrawal et al. (U.S. 2004/0024901) Telecommunication enhanced mobile IP architecture for intra-domain mobility

Malki et al. (U.S.2001/0046223) Hierarchical mobility management for wireless network

Robbins et al. (U.S. 2002/0021689) Method and apparatus for transparent internet mobility management

Ahmed et al. (U.S. 6690659) Addressing techniques for use in an internet protocol-based multimedia mobile network

Reddy et al. (U.S. 2001/0044305) Mobility management in wireless internet protocol networks

Barker et al. (U.S. 5,490,139) Mobility enabling access point architecture for wireless attachment to source routing networks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Eugene whose telephone number is 703-305-8978. The examiner can normally be reached on M-F 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

we

Seema S. Rao
SEEMA S. RAO 5/3/04
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800